

Additions to the Flora of Futuna Island,
Horne Islands
Pacific Plant Studies 33

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In 1971 the first account of the flora of Futuna Island was printed by St. John and Smith (1971). At that time the known flora was 152 species. This total can be segregated into 2 endemics; 91 indigenous species, including the 22 ferns; 14 adventives; and 45 cultivated ornamentals and crop plants.

Now, there has come to hand a new collection from the island, made in June and July 1974, by the anthropologist Patrick V. Kirch, of the Bishop Museum. It consists of 168 specimens. Besides the species already known on the island, the Kirch collection adds 1 new endemic; 12 indigenous; 9 adventives; and 26 ornamentals or crops.

The additional and significant species are here listed. The native species are printed in *italic*.

Pteridophyta
Adiantaceae

Antrophyum reticulatum (Forst. f.) Kaulf. Nuku
Singave, on vertical rock face in humid forest,
30-40 m alt., Kirch 150.

Phanerogamae
Monocotyledones
Gramineae

Bambusa vulgaris Schrad. ex Wendl. "kofe fiti."
Matutufu, Singave, stream bank, 10 m alt.,
Kirch 52.

Echinochloa colonum (L.) Link. Nuku, Singave,
pondfield borders, common, weed, Kirch 114.

Ischaemum rugosum Salisb. "vao papalangi."
Nuku, Singave, weed, border of pondfields,
Kirch 113.

Miscanthus floridulus (Labill.) Warb. "u."
Maunga, Nuku, Singave, 2nd growth, 175 m alt.,
Kirch 100.

Oplismenus compositus (L.) Beauv. "mutie." Aloalo, Nuku, Singave, weed, dry garden zone, 20 m alt., Kirch 71.

Paspalum conjugatum Bergius. "mutie." Aloalo, Nuku, Singave, dry garden zone, weed, 20 m alt., Kirch 66.

Schizostachyum glaucifolium (Rupr.) Munro.

"kofe Futuna." Leava Valley, Singave, cookhouse zone, Kirch 63.

Cyperaceae

Cyperus odoratus L. Nuku, Singave, pondfield embankment, weed, 25 m alt., Kirch 136.

Eleocharis geniculata (L.) R. & S. "kutu," Kirch 109.

E. orostachys Steud. "kutu." Nuku, Singave, abundant in pondfield, 10 m alt., Kirch 110.

Araceae

Caladium bicolor (Ait.) Vent. "kape faka teuteu." ornamental, cookhouse zone, Kirch 49.

Colocasia esculenta (L.) Schott, var. *antiquorum* (Schott.) Hubb. & Rehd. "talo uli," a new name, Singave, Kirch 54.

Cyrtosperma Chamissonis (Schott) Merr. "pulaka." Aloalo, Nuku, Singave, dry garden zone, Kirch 11.

Epipremnum pinnatum (L.) Engl. Aloalo, Nuku, Singave, on trees, dry garden zone, Kirch 69.

Xanthosoma atrovirens C. Koch & Bouché, "talo fiti uli." Aloalo, Nuku, Singave, cult., dry garden zone, Kirch 2.

Dioscoreaceae

Dioscorea alata L. "ufi fakasoa." abandoned hill garden, 50 m alt., Kirch 124.

D. esculenta (Lour.) Burkill, with three cultivars: "ufi lei," Aloalo, Nuku, Singave, dry garden zone, 20 m alt., Kirch 5.

"ufi lei vai," Aroa-Vele uplands, Alo Dist., 75-100 m alt., Kirch 17.

"ufi lei lotuma," ditto, Kirch 18.

Cannaceae

Canna indica L. "fanagana." Nuku, Singave, cookhouse zone, 10 m alt., Kirch 57.

Piperaceae

Peperomia pallida (Forst. f.) A. Dietr., var. *tuamotensis* (F. Br.) Yuncker, on rock face of irrigation ditch, 10 m alt., Kirch 168.

Moraceae

Artocarpus altilis (Parkins. ex Z) Fosb. "mei aveave." Nuku, Singave, cookhouse zone, cult., Kirch 62.

Urticaceae

Elatostema Yenii St. John. "lole." Nuku, Singave, irrigation ditch embankment, 20 m alt., Kirch 137. New island record.

Maoutia australis Wedd. Maunga, Nuku, Singave, 2nd growth, 150-175 m alt., Kirch 82; ditto 83.

Amaranthaceae

Alternanthera sessilis (L.) R. Br. "vao." Aloalo, Nuku, Singave, dry garden zone, weed, Kirch 70; ditto, 111.

Leguminosae

Caesalpinia pulcherrima (L.) Sw. "oai." Nuku, Singave, cookhouse zone, 10 m alt., Kirch 58.

Pueraria lobata (Willd.) Ohwi. "aka." Asoa-Vele uplands, Alo Dist., in swidden garden, Kirch 22; 23; 41.

Vigna marina (Burm.) Merr. "fue." fallow pondfield, 10 m alt., Kirch 117.

Rutaceae

Citrus sinensis (L.) Osbeck. "moli." Nuku, Singave, 2nd growth, 50 m alt., Kirch 162.

Euphorbiaceae

Codiaeum variegatum (L.) Bl. "la'akau kula." Nuku, Singave, cookhouse zone, ornamental, Kirch 36.

Tiliaceae

Grewia crenata (J. R. & G. Forst.) Schinz & Guillem. "iti." Maunga, Nuku, Singave, 2nd growth, 150-175 m alt., Kirch 87.

Malvaceae

Hibiscus tiliaceus L. "fau fatu." New vernacular name. Fata-asau, Nuku, Singave, 2nd growth, 100 m alt., Kirch 97.

Sterculiaceae

Melochia vitiensis Gray. "ito." Asoa-Vele uplands, Alo Dist., 2nd growth, 75-100 m alt., Kirch 24.

Passifloraceae

Passiflora maliformis L. "pasio." Aloalo, Nuku, Singave, dry garden zone, cult. Kirch 74.

Melastomataceae

Medinilla racemosa sp. nov.

M. samoensis sensu St. John & A. C. Smith,
Pacif. Sci. 25: 335, 1971, non (Hochr.)
Christophersen, Bishop Mus., Bull. 154:
30, 1938. Fig. 1.

Diagnosis Holotypi: Liana lignosa in arboribus scandens est, ramulis 3-7 mm diametro subcarnosis, cortice stramineo laevi sed in sicco cun fugis longitudinalibus, internodis 1.5-3.3 cm longis, foliis oppositis glabris, cicatricibus foliorum 5 mm latis lunatis, cicatricibus fascicularum 7 in ordini circulari, petiolis 5-30 mm longis, laminis 4-12 cm longis 3-8.5 cm latis late ellipticis basi cuneata 5-plinervatis supra obscure viridibus infra viridibus et cum nervis elevatis, racemis 3-5 cm longis fere 9-13-floriferis puberulentis cum pilis badiis scabris, bracteis ex axilibus 5-7 mm longis spatulatis, pedicellis 7 mm longis 1-floriferis et proxima calycem cum 2 bracteis 2.7 mm longis anguste lanci-ellipticis foliaceis, calycibus cum tubo 6.2 mm longo hemisphaerico firmo pallido sed lobis nullis, 5 petalis 11 mm longis albis sed roseitinctis obovatis nigri-apiculatis, staminibus 8, filamentis 6 mm longis ligulatis membranaceis, antheris 5 mm longis 1.8 mm latis cum 2 lobis basilibus tomaculiformatis divergentibus obscuris firmis, sacis fertilibus 1.8 mm longis erectis cylindraceutis obtusis et a foramini terminali dehiscentibus, ovario 2.5 mm diametro subgloboso, stylo 6 mm longo filiformi, stigmate vadose convexo, (fructibus incognitis).

Diagnosis of Holotype: Woody vine, climbing on trees; branchlets 3-7 mm in diameter, somewhat fleshy, with smooth stramineous bark, when dried with longitudinal ridges; internodes 1.5-3.3 cm long; leaves^s opposite, glabrous; leaf scars 5 mm wide, lunate; bundle scars 7, in a circular pattern; petioles 5-30 mm long; blades 4-12 cm long, 3-8.5 cm wide, broadly elliptic, the base cuneate, 5-plinerved, above dark green, below green with outstanding nerves; racemes 3-5 cm long, about 9-13-flowered, puberulent with brown scabrous hairs; axillary bracts 5-7 mm long, spatulate;

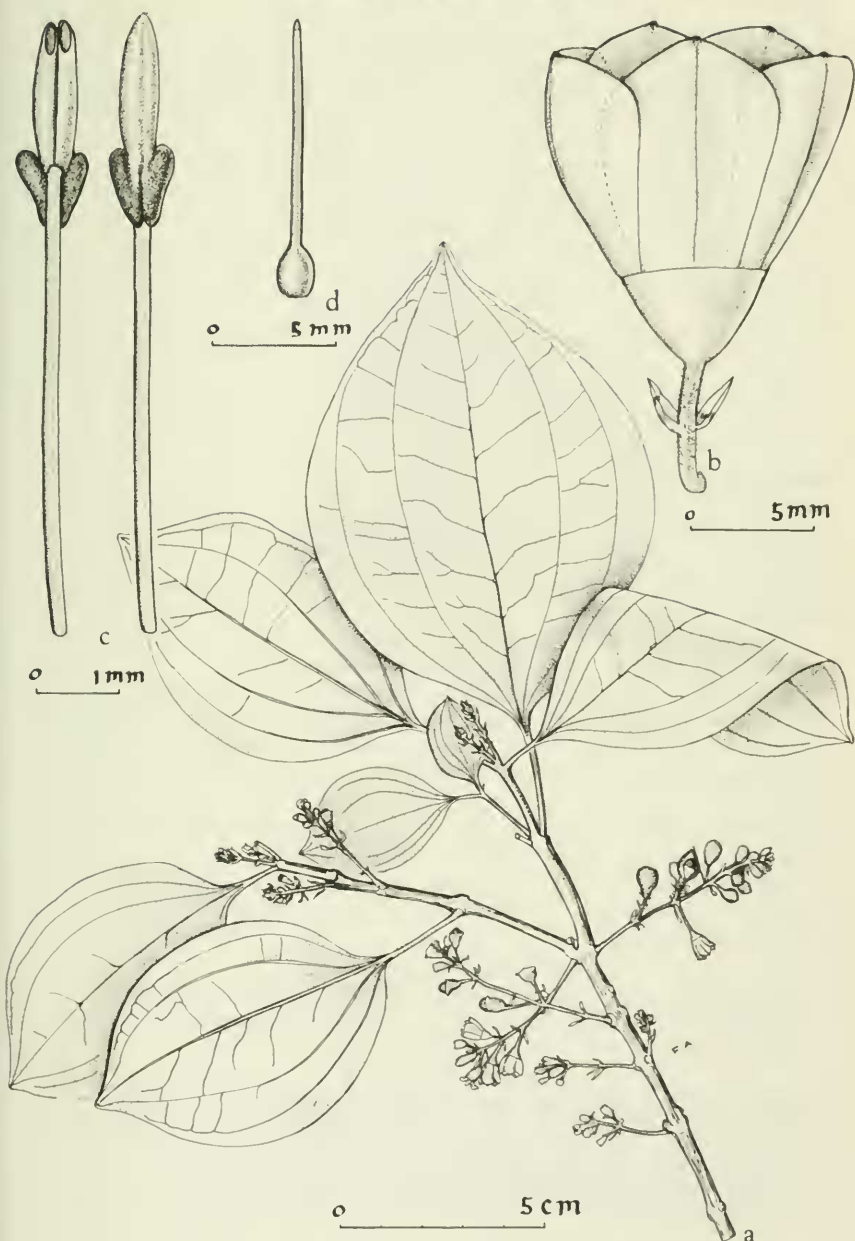


Fig. 1. Medinilla racemosa

pedicels 7 mm long, 1-flowered, and just below the calyx with 2 bracts 2.7 mm long, narrowly lance-elliptic, foliaceous; calyx tube 6.2 mm long, hemispheric, firm, pale, without distinct lobes; petals 5 and 11 mm long, white, tinged with pink, obovate, darkly apiculate; stamens 8; filaments 6 mm long, ligulate, membranous; anthers 5 mm long, 1.8 mm wide, the 2 basal lobes 0.4 mm long, sausage-shaped, dark, firm, divergent, the fertile sacs 1.8 mm long, erect, cylindric, obtuse, dehiscent by a terminal pore; ovary 2.5 mm in diameter, subglobose; style 6 mm long, filiform; stigma low convex, (fruit unknown).

Holotypus: Polynesia, Horne Islands, Futuna Island, Nuku, Singave, humid forest, climbing on trees, 100 m alt., July 12, 1974, Patrick V. Kirch 130 (BISH).

Specimens Examined: Polynesia, Horne Islands, Futuna Island, ditto, Kirch 129 (BISH); pentes sud de Mt. Puke, restes de forêt humide sur terrain volcanique, 500-600 m alt., 27.X.1968, Mackee 19,852 (BISH).

Discussion: M. racemosa is most closely related to M. samoensis (Hochr.) Christophersen, of Upolu, Tutuila, and Savai'i in Samoa, a species with the young shoots brown hirsutulous with scabrous hairs, these more or less persistent; inflorescences umbellate, hirsutulous; petals 5 mm long. M. racemosa has the leaves glabrous, and the young stems nearly so; inflorescences racemose, puberulent; and the petals 11 mm long.

The new epithet is the Latin adjective racemosa, with a raceme, and it refers to the inflorescence of the species.

Onagraceae

Ludwigia octivalvis (Jacq.) Raven, subsp *octivalvis*. "ta'ekana." Nuku, Singave, taro terraces, weed, Kirch 115.

Convolvulaceae

Ipomoea brasiliensis (L.) Sweet. "fue kau kula."

Matatufu, Nuku, Singave, second growth, abandoned swidden garden, 20 m alt., Kirch 53.

Merremia peltata (L.) Merr. "pulupulou." New vernacular name. Kirch 88.

Apocynaceae

Alyxia bracteolosa Gray. "maile kulu." New vernacular name. Fata-asau, Nuku, Singave, 2nd growth, 100 m alt., Kirch 93.

Labiatae

Coleus scutellarioides (L.) Benth. Matufu, Nuku, Singave, houseyard, weed, Kirch 43.

Solanaceae

Capsicum annuum L. "polo." Matufu, Nuku, Singave, cookhouse zone, Kirch 45.

Rubiaceae

Canthium Merrillii (Setchell) Christophersen. "funa." Nuku, Singave, humid forest, 30-40 m alt., Kirch 160.

Cucurbitaceae

Luffa cylindrica (L.) Roem. "timo vao." Nuku, Singave, 2nd growth, feral vine, 25 m alt., Kirch 138.

Compositae

Synedrella nodiflora (L.) Gaertn. "petelo." Aloalo, Nuku, Singave, dry garden zone, weed, Kirch 73.

Literature Cited

St. John, Harold and Albert C. Smith, 1971.
The Vascular Plants of the Horne and Wallis Islands. Pacif. Sci. 25: 313-348.